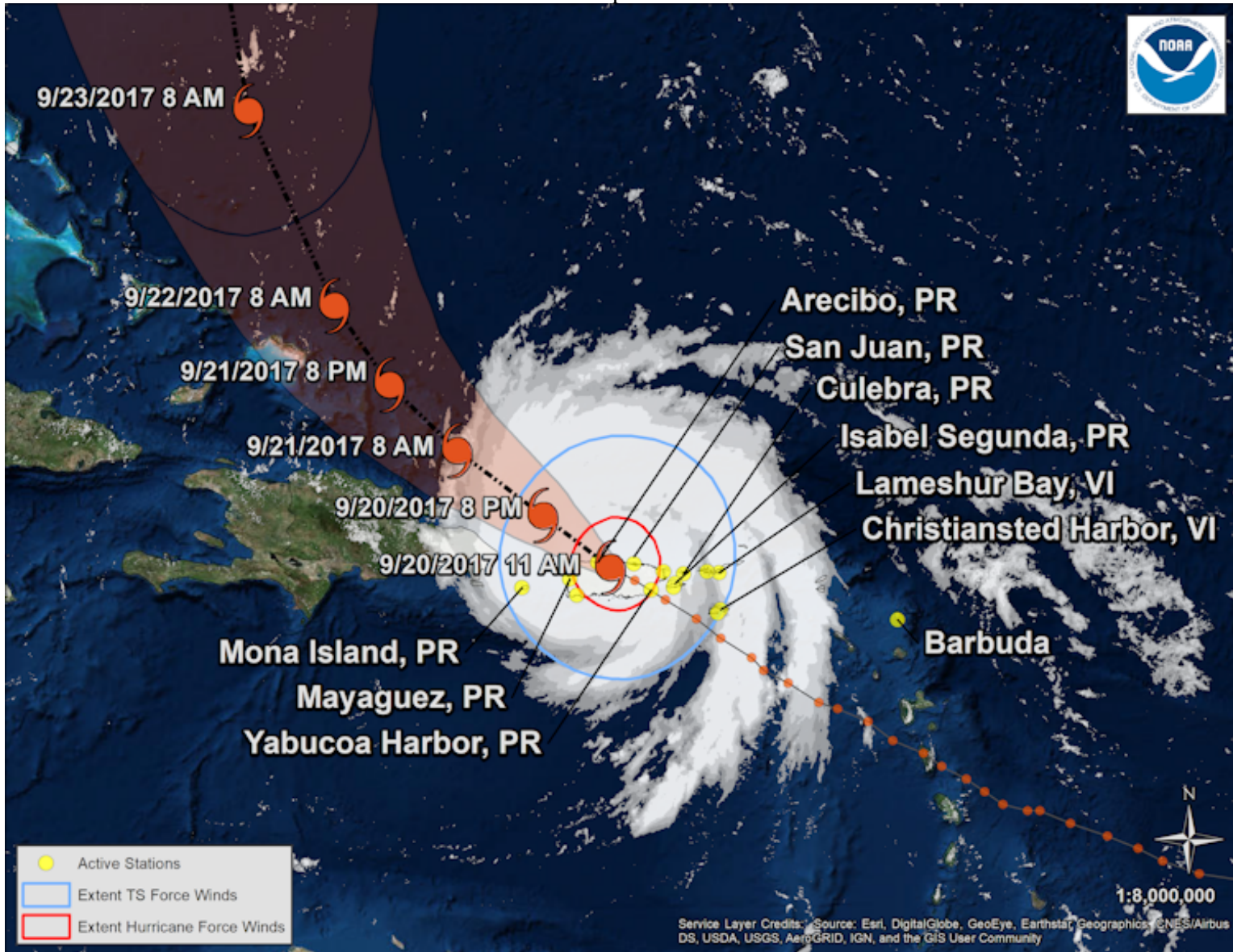




Hurricane MARIA QuickLook Posted: 12:00 EST 09/20/2017

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 9/20/2017 12:00 AST, water levels in western Puerto Rico are measuring between 0.13 feet to 1.74 feet above normal tide levels with a maximum of 1.98 feet observed at Arecibo. Wind speeds vary between 40 to 60 knots with gusts as high as 95 knots observed at Arceibo. The U.S. Virgin Islands and eastern Puerto Rico have subsiding water levels with barometric pressure returning to normal as Hurricane Maria continues to move northwest.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: KAK

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

Hurricane Maria Advisory Number 18

NWS National Hurricane Center Miami FL

1100 AM AST Wed Sep 20 2017

...DESTRUCTIVE WINDS AND FLOODING CONTINUE OVER PORTIONS OF PUERTO RICO...

...CENTER OF MARIA APPROACHING THE NORTHERN COAST OF PUERTO RICO...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The government of France has discontinued the Tropical Storm Warning for St. Martin and St. Barthelemy.

The government of St. Maarten has discontinued the Tropical Storm Warning and Hurricane Watch for St. Maarten.

The government of the Netherlands has discontinued the Tropical Storm Warning for Saba.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

- * U.S. Virgin Islands
- * British Virgin Islands
- * Puerto Rico, Culebra, and Vieques
- * Dominican Republic from Cabo Engano to Puerto Plata
- * Turks and Caicos Islands and the Southeastern Bahamas

A Tropical Storm Warning is in effect for...

- * Dominican Republic west of Puerto Plata to the northern border of the Dominican Republic and Haiti
- * Dominican Republic west of Cabo Engano to Punta Palenque

A Hurricane Watch is in effect for...

- * Dominican Republic from Isla Saona to Cabo Engano

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. Preparations to protect life and property should be rushed to completion.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

Interests elsewhere in Hispaniola and the Bahamas should monitor the progress of Maria.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

DISCUSSION AND 48-HOUR OUTLOOK

At 1100 AM AST (1500 UTC), the center of Hurricane Maria was located inland over Puerto Rico near latitude 18.4 North, longitude 66.5 West. Maria is moving toward the northwest near 12 mph (19 km/h), and this general motion with a gradual decrease in forward speed is expected through early Friday. On the forecast track, the center of Maria will move offshore of the northern coast of Puerto Rico during the next couple of hours. The center will then pass offshore of the northeastern coast of the Dominican Republic tonight and Thursday and then move near the Turks and Caicos Islands and southeastern Bahamas Thursday night and Friday.

Maximum sustained winds are near 140 mph (220 km/h) with higher gusts. Maria is a category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Little change in strength is forecast during the next 48 hours, and Maria is expected to remain a dangerous major hurricane through Friday.

Hurricane-force winds extend outward up to 60 miles (95 km) from the center, and tropical-storm-force winds extend outward up to 150 miles (240 km).

The estimated minimum central pressure is 930 mb (27.47 inches).

HAZARDS AFFECTING LAND

WIND: Hurricane and tropical storm conditions are occurring over Puerto Rico and the Virgin Islands. Tropical storm conditions are expected to begin in the warning areas in the Dominican Republic this afternoon, with hurricane conditions starting in the hurricane warning area tonight. Tropical storm conditions are expected to begin in the Turks and Caicos Islands and the southeastern Bahamas Thursday morning, with hurricane conditions starting Thursday evening.

Wind speeds atop and on the windward sides of hills and mountains and on high-rise buildings could be much stronger than the near- surface winds indicated in this advisory.

STORM SURGE: The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water is expected to reach the following heights above ground if the peak surge occurs at the time of high tide...

Puerto Rico...6 to 9 ft

The deepest water will occur along the immediate coast near and to the north and east of the landfall location, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

A dangerous storm surge accompanied by large and destructive waves will raise water levels by as much as 4 to 6 feet above normal tide levels in the hurricane warning area in the Dominican Republic, and 1 to 3 ft elsewhere along the northern coasts of the Dominican Republic and Haiti.

A dangerous storm surge accompanied by large and destructive waves will raise water levels by as much as 10 to 15 feet above normal tide levels in the hurricane warning area near and to the north of the center of Maria for both the Southeastern Bahamas and the Turks and Caicos Islands.

RAINFALL: Maria is expected to produce the following rainfall totals through Friday:

Puerto Rico...12 to 18 inches, isolated 25 inches

U.S. and British Virgin Islands...additional 5 to 10 inches, isolated 15 inches

Northern and eastern Dominican Republic, Turks and Caicos and southeast Bahamas...8 to 16 inches, isolated 20 inches

Northern Haiti...2 to 4 inches

Rainfall on these islands will cause life-threatening flash floods and mudslides

TORNADOES: Several tornadoes are possible over Puerto Rico and the U.S. Virgin Islands today.

THE EYE: Do not venture outside when the calm eye of the hurricane passes over, as dangerous winds will return very quickly when the eye moves away.

SURF: Swells generated by Maria are affecting the Leeward Islands, Puerto Rico, and the Virgin Islands. These swells will begin affecting the northern coast of Hispaniola, the Turks and Caicos Islands, and the Southeastern Bahamas during the next day or two. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

Next intermediate advisory at 200 PM AST.

Next complete advisory at 500 PM AST.

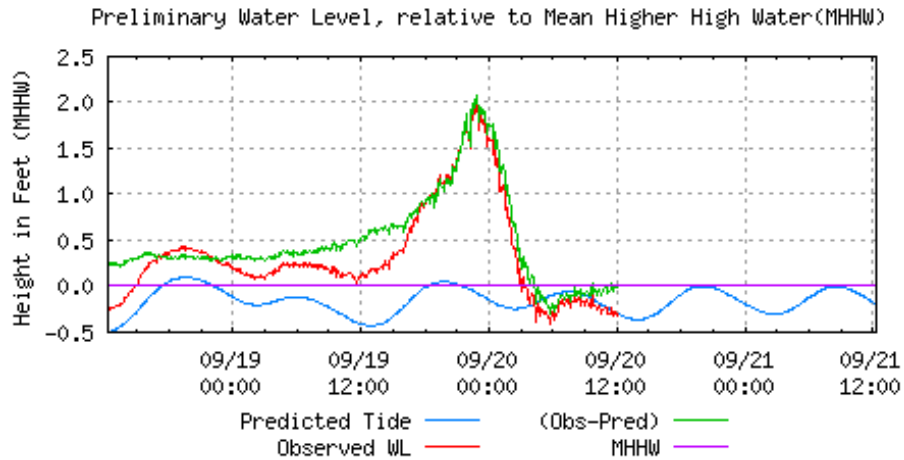
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Forecaster Berg

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Christiansted Harbor, St Croix - Water Level](#), [Christiansted Harbor, St Croix - Barometric](#), [Lameshur Bay, St John - Water Level](#), [Lameshur Bay, St John - Barometric](#), [Culebra - Water Level](#), [Culebra - Barometric](#), [Isabel Segunda, Vieques Island - Water Level](#), [Yabucoa Harbor - Water Level](#), [San Juan, La Puntilla, San Juan Bay - Water Level](#), [San Juan, La Puntilla, San Juan Bay - Barometric](#), [Arecibo - Water Level](#), [Arecibo - Winds](#), [Arecibo - Barometric](#), [Mayaguez - Water Level](#), [Mayaguez - Winds](#), [Mayaguez - Barometric](#), [Mona Island - Water Level](#), [Mona Island - Barometric](#), [Barbuda - Water Level](#), [Barbuda - Barometric](#)

NOAA/NOS/CO-OPS 9751364 Christiansted Harbor, St Croix, VI



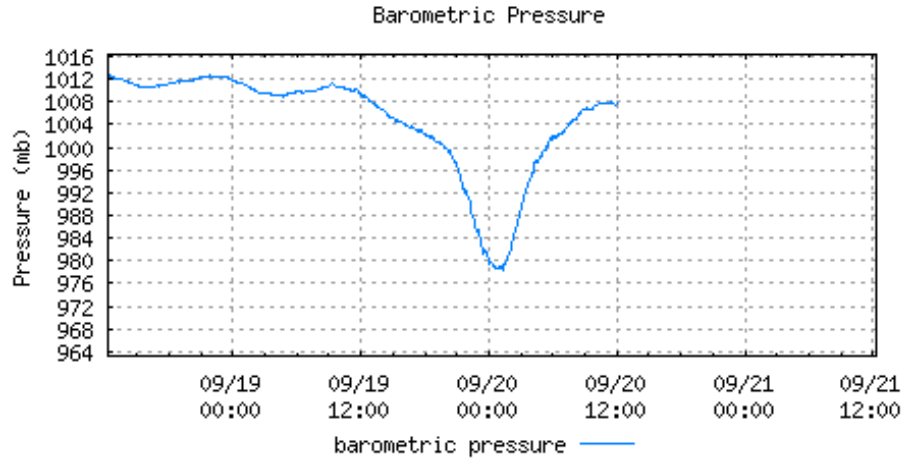
Last Observed Sample: 09/20/2017 12:06 (AST). Data relative to MHHW

Observed: -0.32 ft. Predicted: -0.30 ft. Residual: -0.02 ft.

Historical Maximum Water Level: Oct 16 2008, 1.17 ft.

Next High Tide: 09/20/2017 20:01 (AST), -0.00 ft.

NOAA/NOS/CO-OPS 9751364 Christiansted Harbor, St Croix, VI

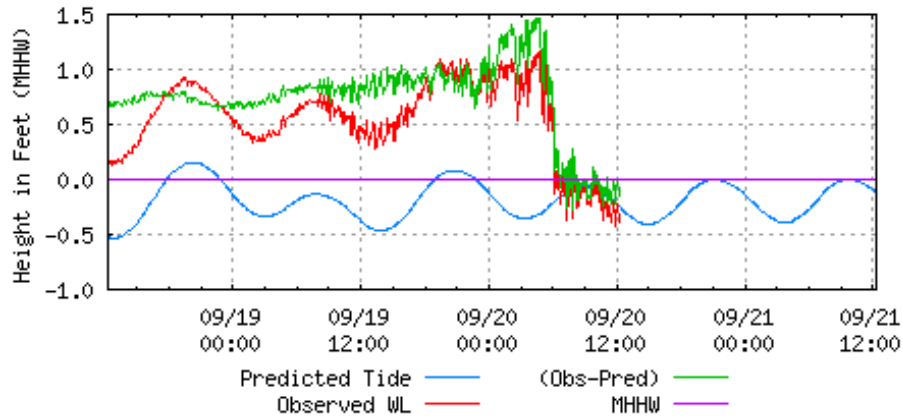


Last Observed Sample: 09/20/2017 12:06 (AST)

Barometric Pressure: 1007.9 mb

NOAA/NOS/CO-OPS 9751381 Lameshur Bay, St John, VI

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/20/2017 12:12 (AST). Data relative to MHHW

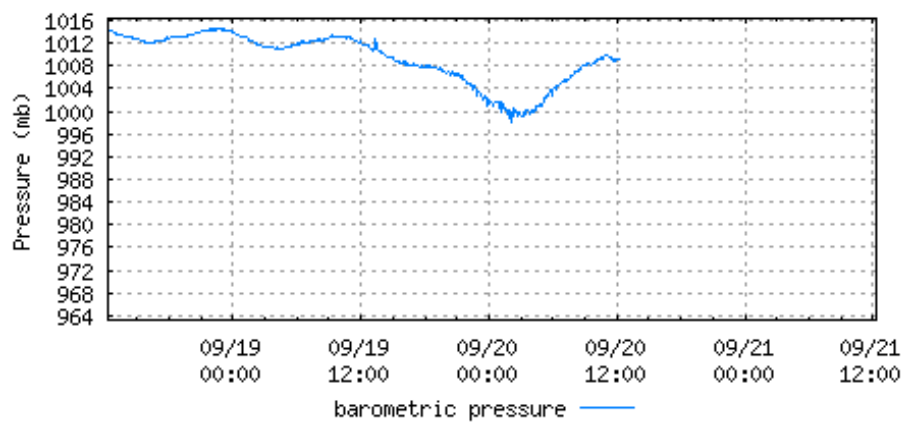
Observed: -0.39 ft. Predicted: -0.25 ft. Residual: -0.14 ft.

Historical Maximum Water Level: Aug 30 2010, 0.89 ft.

Next High Tide: 09/20/2017 21:05 (AST), 0.00 ft.

NOAA/NOS/CO-OPS 9751381 Lameshur Bay, St John, VI

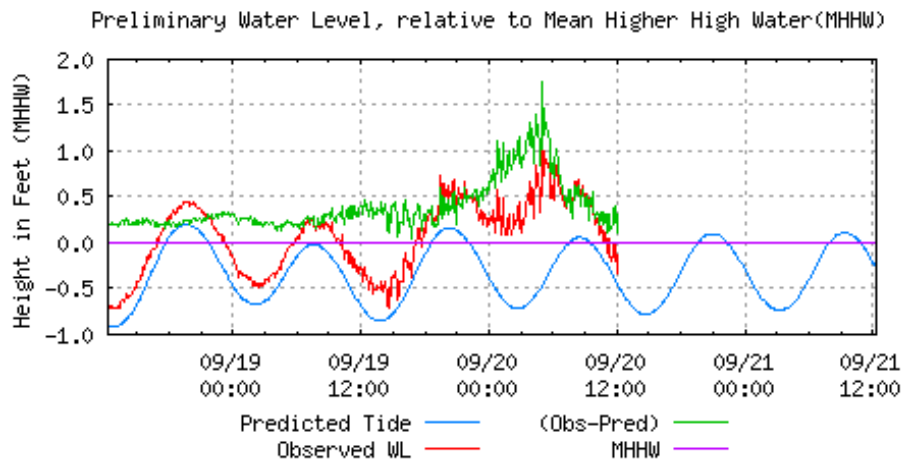
Barometric Pressure



Last Observed Sample: n/a

Barometric Pressure: 0.0 mb

NOAA/NOS/CO-OPS 9752235 Culebra, PR



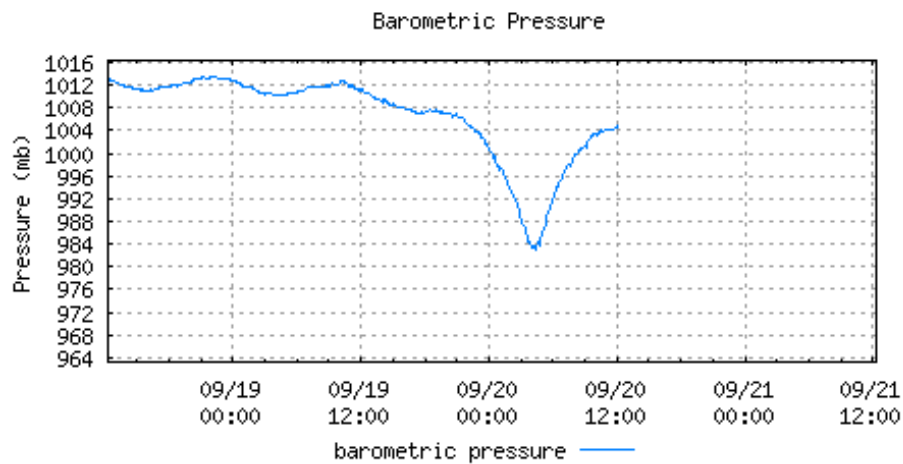
Last Observed Sample: 09/20/2017 12:06 (AST). Data relative to MHHW

Observed: -0.34 ft. Predicted: -0.46 ft. Residual: 0.12 ft.

Historical Maximum Water Level: Nov 6 2006, 0.84 ft.

Next High Tide: 09/20/2017 20:55 (AST), 0.10 ft.

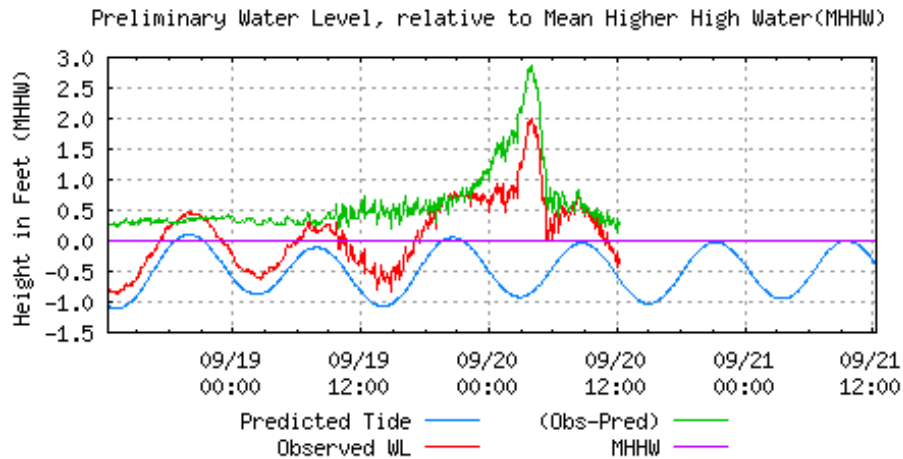
NOAA/NOS/CO-OPS 9752235 Culebra, PR



Last Observed Sample: n/a

Barometric Pressure: 0.0 mb

NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR



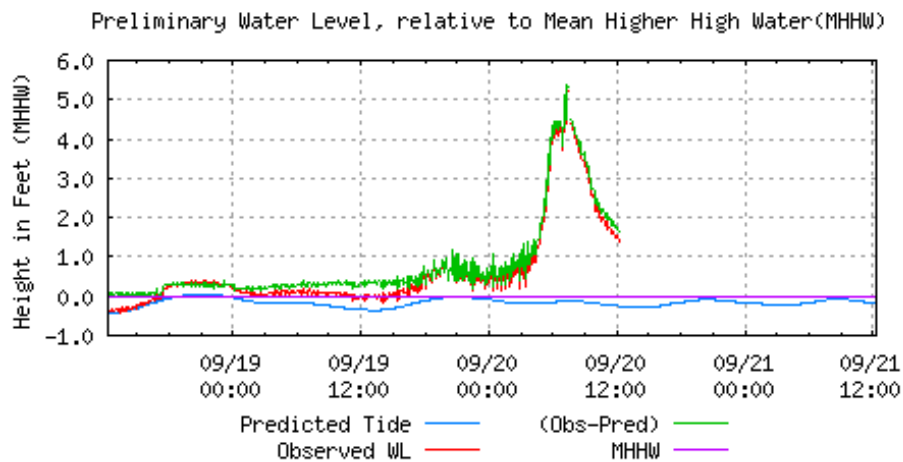
Last Observed Sample: 09/20/2017 12:12 (AST). Data relative to MHHW

Observed: -0.36 ft. Predicted: -0.62 ft. Residual: 0.26 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/20/2017 21:12 (AST), -0.02 ft.

NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR



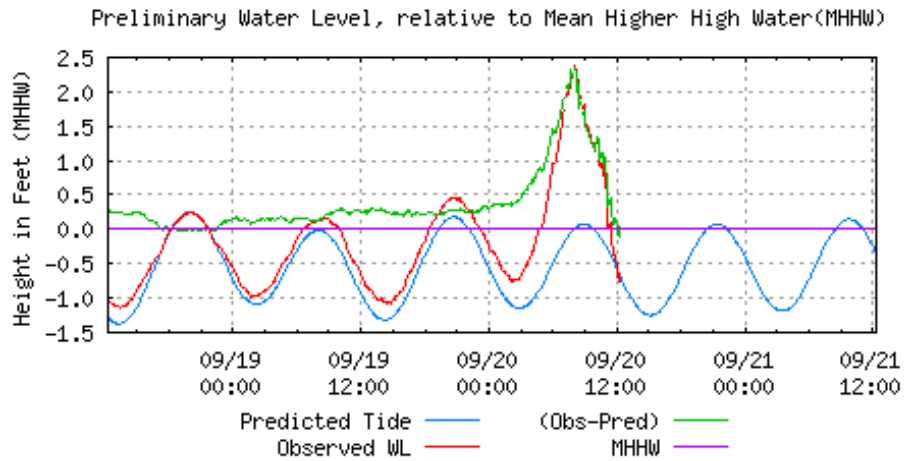
Last Observed Sample: 09/20/2017 12:12 (AST). Data relative to MHHW

Observed: 1.37 ft. Predicted: -0.26 ft. Residual: 1.63 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/20/2017 20:27 (AST), -0.08 ft.

NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



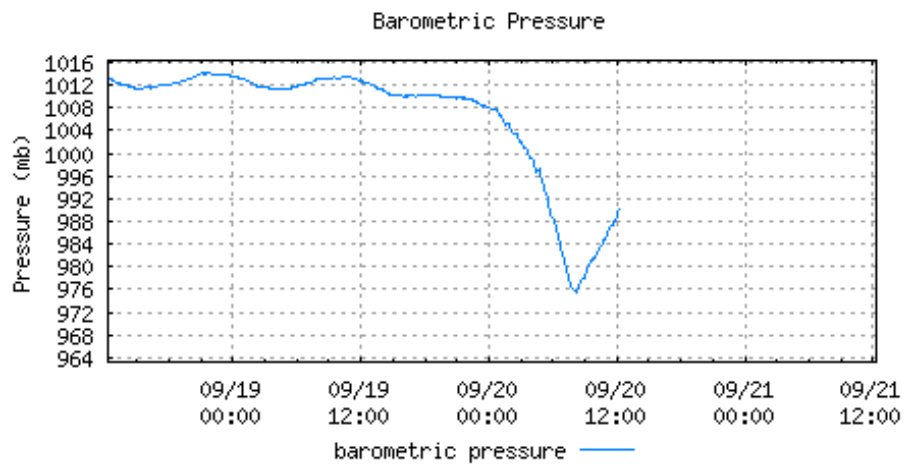
Last Observed Sample: 09/20/2017 12:18 (AST). Data relative to MHHW

Observed: -0.64 ft. Predicted: -0.67 ft. Residual: 0.03 ft.

Historical Maximum Water Level: Sep 18 1989, 2.77 ft.

Next High Tide: 09/20/2017 21:22 (AST), 0.08 ft.

NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR

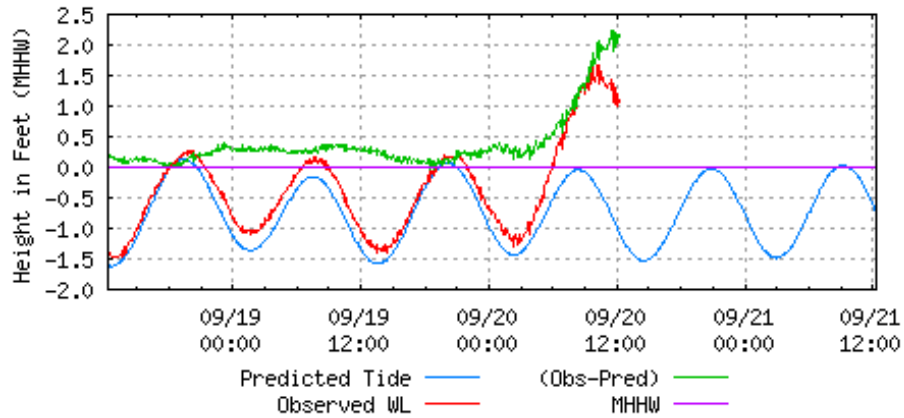


Last Observed Sample: 09/20/2017 12:18 (AST)

Barometric Pressure: 990.0 mb

NOAA/NOS/CO-OPS 9757809 Arecibo, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/20/2017 12:18 (AST). Data relative to MHHW

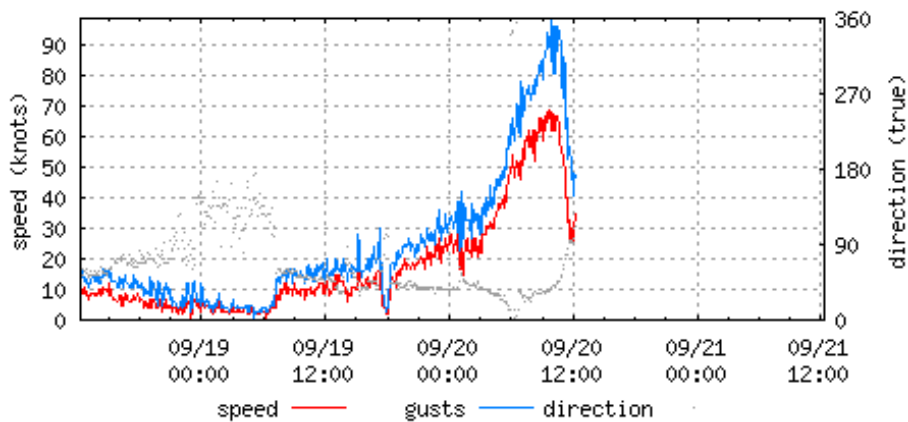
Observed: 0.99 ft. Predicted: -1.10 ft. Residual: 2.09 ft.

Historical Maximum Water Level: Oct 8 2010, 0.90 ft.

Next High Tide: 09/20/2017 20:51 (AST), -0.03 ft.

NOAA/NOS/CO-OPS 9757809 Arecibo, PR

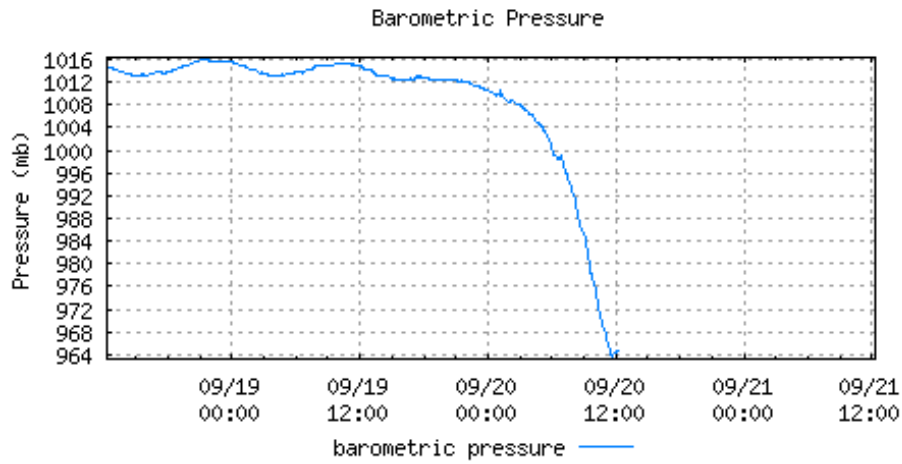
Wind Speed / Gusts / Direction



Last Observed Sample: 09/20/2017 12:18 (AST)

Wind Speed: 26 knots Gusts: 39 knots Direction: 107° T

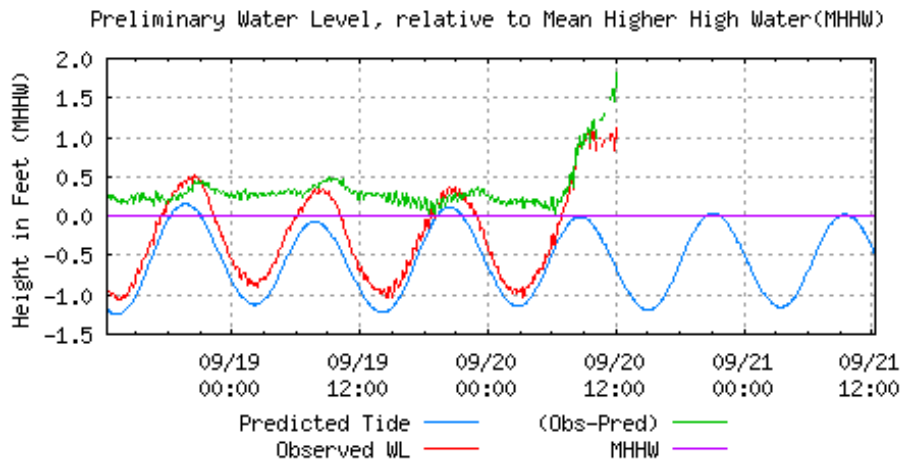
NOAA/NOS/CO-OPS 9757809 Arecibo, PR



Last Observed Sample: 09/20/2017 12:18 (AST)

Barometric Pressure: 965.2 mb

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR



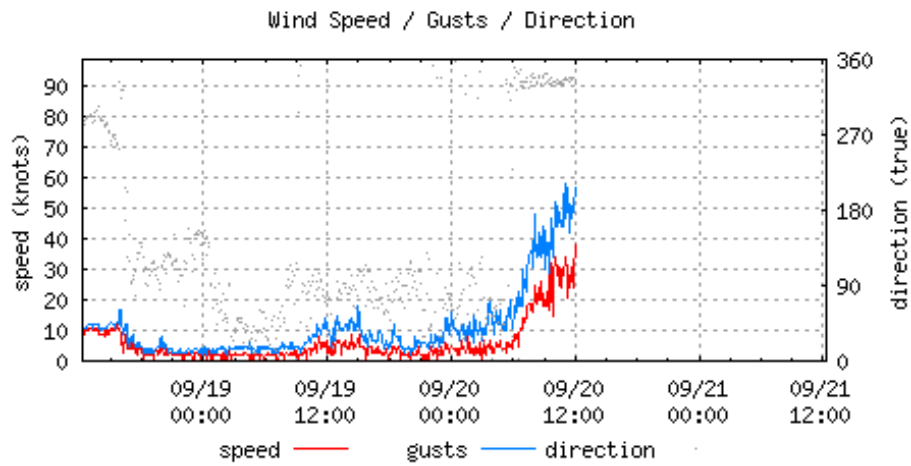
Last Observed Sample: 09/20/2017 12:12 (AST). Data relative to MHHW

Observed: 0.94 ft. Predicted: -0.72 ft. Residual: 1.66 ft.

Historical Maximum Water Level: Oct 1 2015, 0.99 ft.

Next High Tide: 09/20/2017 21:06 (AST), 0.03 ft.

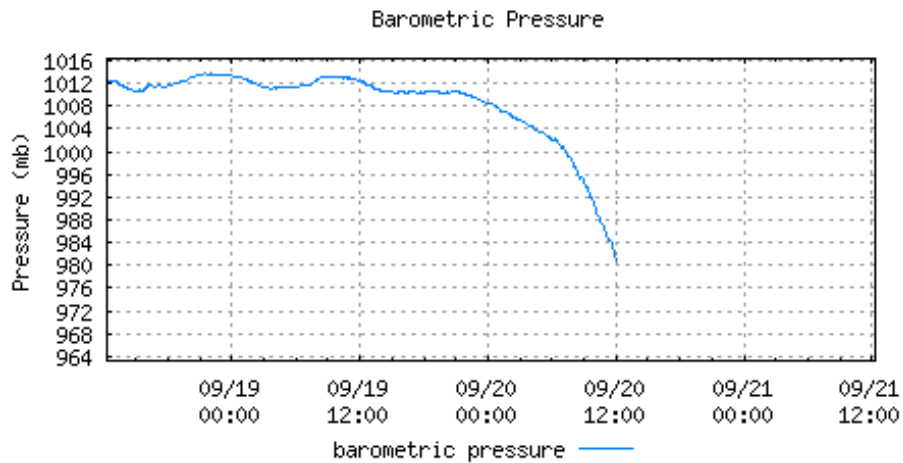
NOAA/NOS/CO-OPS 9759394 Mayaguez, PR



Last Observed Sample: 09/20/2017 12:12 (AST)

Wind Speed: 39 knots Gusts: 67 knots Direction: 333° T

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR

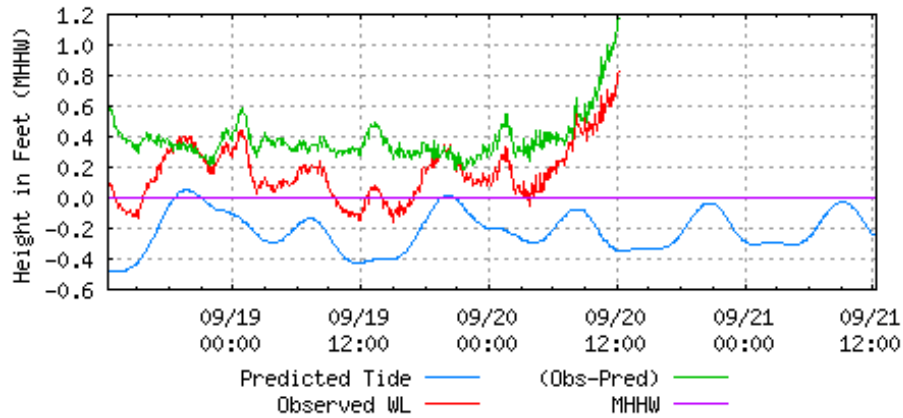


Last Observed Sample: 09/20/2017 12:12 (AST)

Barometric Pressure: 980.2 mb

NOAA/NOS/CO-OPS 9759938 Mona Island, PR

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Last Observed Sample: 09/20/2017 12:18 (AST). Data relative to MHHW

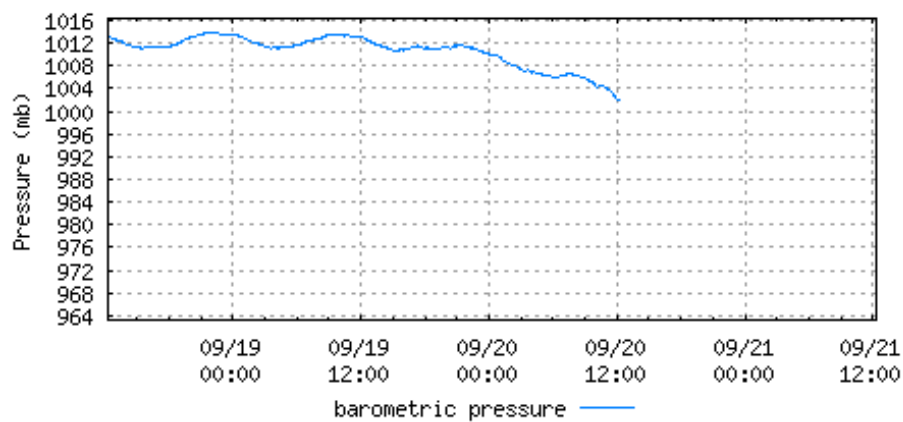
Observed: 0.74 ft. Predicted: -0.34 ft. Residual: 1.08 ft.

Historical Maximum Water Level: Dec 23 2010, 1.24 ft.

Next High Tide: 09/20/2017 20:41 (AST), -0.03 ft.

NOAA/NOS/CO-OPS 9759938 Mona Island, PR

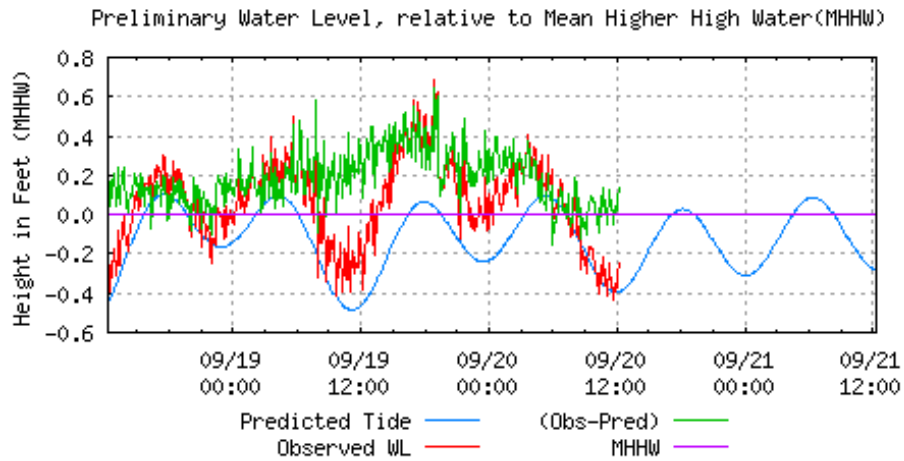
Barometric Pressure



Last Observed Sample: 09/20/2017 12:18 (AST)

Barometric Pressure: 1001.9 mb

NOAA/NOS/CO-OPS 9761115 Barbuda



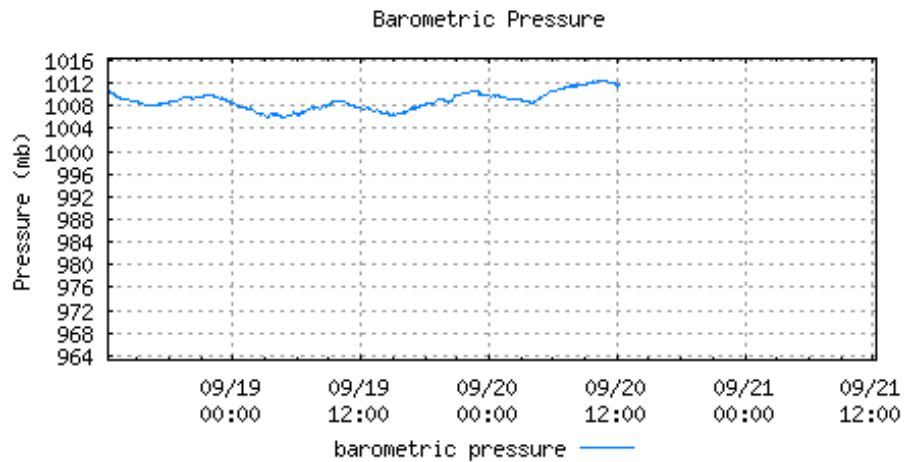
Last Observed Sample: 09/20/2017 12:12 (AST). Data relative to MHHW

Observed: -0.25 ft. Predicted: -0.39 ft. Residual: 0.14 ft.

Historical Maximum Water Level: Aug 23 2012, 1.05 ft.

Next High Tide: 09/20/2017 18:11 (AST), 0.03 ft.

NOAA/NOS/CO-OPS 9761115 Barbuda



Last Observed Sample: 09/20/2017 12:12 (AST)

Barometric Pressure: 1011.6 mb

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
9751364	Christiansted Harbor, St Croix, VI	09/20/2017 12:12 (AST)	-0.28 ft	-0.30 ft	0.02 ft	2.00 ft
9751381	Lameshur Bay, St John, VI	09/20/2017 12:18 (AST)	-0.30 ft	-0.25 ft	-0.05 ft	1.16 ft
9752235	Culebra, PR	09/20/2017 12:12 (AST)	-0.23 ft	-0.48 ft	0.25 ft	1.29 ft
9752619	Isabel Segunda, Vieques Island, PR	09/20/2017 12:12 (AST)	-0.36 ft	-0.62 ft	0.26 ft	2.01 ft
9754228	Yabucoa Harbor, PR	09/20/2017 12:18 (AST)	1.45 ft	-0.26 ft	1.71 ft	5.27 ft
9755371	San Juan, La Puntilla, San Juan Bay, PR	09/20/2017 12:18 (AST)	-0.64 ft	-0.67 ft	0.03 ft	2.38 ft
9757809	Arecibo, PR	09/20/2017 12:18 (AST)	0.99 ft	-1.10 ft	2.09 ft	1.68 ft
9759394	Mayaguez, PR	09/20/2017 12:12 (AST)	0.94 ft	-0.72 ft	1.66 ft	1.13 ft
9759938	Mona Island, PR	09/20/2017 12:18 (AST)	0.74 ft	-0.34 ft	1.08 ft	0.83 ft
9761115	Barbuda	09/20/2017 12:12 (AST)	-0.25 ft	-0.39 ft	0.14 ft	0.68 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce